

UMSL sustainability

ACTION PLAN

2013

1 University Blvd.
Saint Louis, Missouri 63121
umsl.edu/~sustainability/

From the Chancellor

Joining the American College & University Presidents' Climate Commitment was a vital step toward defining and pursuing sustainability policy and practices. This commitment provides an opportunity to put our words into action, enable us to record our progress and incorporate fresh insight from other ACUPCC members.

Our commitment to sustainability can be seen in the achievements that have been made. We are poised to focus on a number of key objectives: education - increasing sustainability courses; energy- reduce consumption of nonrenewable energy resources; adopting green building standards; reduce waste; increase recycling and establish measures to offset greenhouse gas emissions.

The objectives in our ACUPCC Sustainability Action Plan provide a roadmap and prioritization we have outlined to reach our commitment. Through the effort of our students, faculty and staff, we are determined to find ways to have a positive effect on our environment.

I invite you to review the Campus Sustainability Action Plan and consider how you might find a role for yourself in helping UMSL accomplish our goals.

Sincerely,

Dr. Thomas F. George
Chancellor, University of Missouri-St.Louis





The UMSL Campus Sustainability Action Plan

In its Campus Sustainability Action Plan, the University of Missouri – St. Louis outlines a broad framework and strategy for moving forward with sustainability efforts.



EDUCATION



ENERGY



FOOD & DINING SERVICES



GREEN BUILDING



PROCUREMENT



TRANSPORTATION



WASTE

The Sustainability Action Plan addresses key aspects and focus areas of sustainability, and follows those with objectives and interim benchmarks for a variety of topics.

The snapshot presented in this Campus Sustainability Action Plan provides a road map to campus sustainability by explaining the overarching objectives and actions UMSL will take. This Action Plan is based on a more comprehensive, detailed report that includes an in-depth look at the history of previous initiatives as well as the proposed development of new programs, policies, and procedures. The UMSL Campus Sustainability Report truly describes the context of sustainability on campus and provides a vision for sustainability at the University. In addition to exploring a wide variety of sustainability issues and how UMSL is involved with each topic, the UMSL Campus Sustainability Report outlines a series of related specific actions. Subsequent chapters may be added to that report at a later date to further address issues as they arise, and those topics would then be reflected in this Action Plan.

These goals, objectives, and aspirations are ambitious and will take a concerted effort from a broad cross-section of campus stakeholders. The current version of the Action Plan's is prioritized by the first three years and then the next ten years, dating the document out to 2025. It should be noted, however, that this Action Plan is intended to be a working tool that the campus community can refer to and refine as UMSL prepares for the future.

The overarching intention behind this documentation is simple – reducing the environmental consequences of activities at UMSL. It should be noted that the eventual aspirations are not to be “less bad” or less un-sustainable, but to truly impact the environmental, social, and economic spheres in positive ways. The University stands to benefit from environmental stewardship and to demonstrate leadership through effective role-modeling, and looks to these focus areas of education, energy, food, green building, procurement, transportation, and waste first in its goal-setting.



SUSTAINABILITY GOALS

EDUCATION: Create an active culture of sustainability teaching, learning, and research.

ENERGY: Reduce greenhouse gases and energy & water consumption.

FOOD & DINING SERVICES: Reduce air, water, and soil pollution and toxins.

GREEN BUILDINGS: Increase campus built square-footage operating to certification level.

PROCUREMENT: Support UM System-wide best practices in sustainable procurement.

TRANSPORTATION: Provide leadership in local sustainable transportation practices.

WASTE: Increase diversion of solid waste and reduce resource impact.

KEY OBJECTIVES FOR 2025

The following are some of the specific key objectives which will lead to meeting the broader goals:



EDUCATION

- >> Increase the variety, quantity, and enrollment in sustainability-focused and sustainability-related courses.
- >> Increase the use of campus sustainability issues and campus facilities as topics of academic inquiry.
- >> Enroll 25% of staff / faculty and 30% of students for sustainability eNewsletter.
- >> Increase the variety, quantity, and attendance / participation in sustainability-related educational programs and events.



ENERGY

- >> Reduce consumption of energy derived from non-renewable resources.
- >> Meter and monitor all major buildings individually for gas and electricity.
- >> Register 15% of campus-built square-feet with EnergyStar.
- >> Complete retro-commissioning on buildings whose systems have not outlived their designed life.
- >> Identify additional opportunities for conservation.



FOOD & DINING SERVICES

- >> Ensure 30% of total food purchases by Dining Services qualify as sustainable.
- >> Comply with sustainable food policy.



GREEN BUILDING

- >> Comply with green building standards policy.
- >> Certify 8-10% of existing buildings under LEED-EB.



PROCUREMENT

- >> Purchase 90% white copy paper at 100% PCW, PCF, FSC-certified level.
- >> Purchase 90% colored paper, cardstock, and alternative sizes at least 30% PCW level.
- >> Switch University letterhead to 100% PCW, PCF, FSC-certified level.



TRANSPORTATION

- >> Reduce campus fleet fuel use.
- >> Reduce single occupancy vehicle commuting.
- >> Increase on-campus bicycling and bike commuting.
- >> Convert a portion of the campus fleet to alternatively fueled vehicles.



WASTE

- >> Divert waste from landfills.
- >> Divert construction and renovation waste at a rate of 75-90%.
- >> Reduce total waste by 10%.



EMISSIONS

- >> Forthcoming, per the impending ghg inventory

IMPLEMENTATION OF SUSTAINABILITY OBJECTIVES AT UMSL

All actions recommended in the Action Plan are organized by time period (Years 1-3 and Years 4-13) and whether they are higher or lower priority. Certain action steps listed will not be implemented if funding is not available or if costs are determined to be prohibitive or substantially exceed the related benefits.

The Sustainability Office is responsible for providing annual updates on progress, including updated information for a variety of “indicator” data points (e.g. campus energy use, number of sustainability-focused courses, greenhouse gas emissions). Periodic review of the Action Plan will mirror updates to the UMSL Campus Sustainability Report to reflect progress.

SUSTAINABILITY GOALS LEAD TO UMSL ASPIRATIONS

GOALS



Active culture of sustainability teaching, learning, and research



Reduced greenhouse gases and overall energy & water consumption



Reduced air, water, and soil pollution and toxins



Increase in campus built square-footage operating to certification level



Supporter of UM System-wide best practices in sustainable procurement



Leadership in local sustainable transportation practices



Increased diversion of solid waste and reduced resource impact

ASPIRATIONS

ECO-LITERATE CAMPUS POPULATION

REDUCED DEPENDENCE ON FOSSIL FUELS

ALL GOALS IN SUSTAINABLE FOOD POLICY ACHIEVED

100% OF CAMPUS BUILDINGS OPERATING AT HIGH-PERFORMANCE LEVELS

ALL GOALS IN UM SYSTEM SUSTAINABLE PURCHASING POLICY ACHIEVED

ALL GOALS IN SUSTAINABLE TRANSPORTATION POLICY ACHIEVED

ZERO NET WASTE

SPECIFIC ACTIONS ADDRESSING THE ACUPCC

Per our signature to the American Campus & University Presidents' Climate Commitment, the University has agreed to meet several (bolded) of the seven tangible actions to reduce greenhouse gases:

- 1. Establish a policy that all new campus construction will be built to at least the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver standard or equivalent.**
2. Adopt an energy-efficient purchasing policy requiring purchase of EnergyStar certified products in all areas for which such ratings exist.
3. Establish a policy of offsetting all greenhouse gas emissions generated by air travel paid for by the institution.
- 4. Encourage use of and provide access to public transportation for all faculty, staff, students, and visitors at our institution.**
5. Within one year of signing this document, begin purchasing or producing at least 15 percent of our institution's electricity consumption from renewable sources.
6. Establish a policy or a committee that supports climate and sustainability shareholder proposals at companies where our institution's endowment is invested.
- 7. Participate in the waste minimization component of the national Recyclemania competition, and adopt three or more associated measures to reduce waste.**



TIMELINE AND PRIORITIES FOR SUSTAINABILITY OBJECTIVES AT UMSL

THE FIRST THREE YEARS

(2013-2015)

THE NEXT TEN YEARS

(2016-2025)



EDUCATION

HIGHER PRIORITY	Approve the definition of sustainability in the curriculum as a means of tracking relevant courses	Pursue opportunities for funding and other support to hold faculty development workshops for incorporating sustainability into the curriculum
	Pursue opportunities for funding and other support to hold faculty development workshops for incorporating sustainability into the curriculum	Promote greater use of campus sustainability living/learning laboratories
	Maintain an updated list of campus sustainability topics, projects, and opportunities appropriate for classroom projects, theses, and studies	Start sustainability awards program to recognize champions and successes
	Continue to engage in education campaigns	Start peer-to-peer education program
	Continue to identify opportunities for communicating sustainability with various constituencies	Develop sustainable living workshop series for staff and faculty
	Create and implement annual sustainability event	
	Create outreach program based on resource use data	
	Continue to incorporate sustainability issues into Orientation programs	
	Begin the Sustainability Action Fellowship and Environmental Leadership programs	
	Incorporate sustainability information into staff/faculty orientation, creating a "green living and learning guide"	
LOWER PRIORITY	Maintain a list of current sustainability-related faculty and student research activities	Develop sustainability pledge program for students, staff, faculty
	Participate in national campaigns and competitions where appropriate	Create series of public service announcements highlighting sustainability behaviors
	Conduct outreach about the activities and successes of various offices, departments, and individuals on campus and about relevant programs	



TIMELINE AND PRIORITIES FOR SUSTAINABILITY OBJECTIVES AT UMSL

2013-2015

2016-2025



ENERGY

HIGHER PRIORITY	Review energy management program and the responsibilities of the energy coordinator position	Move forward with feasible solar installations and emergency power alternatives
	Complete individual building metering for water, gas, and electricity use	Explore feasibility of other renewable energy technologies
	Begin conducting monthly and annual reviews of building-level energy performance	Create targeted education campaigns based on metering data
	Create long-term energy management plan detailing potential projects	Register campus square footage and document improvements to achieve an EnergyStar score
	Pursue all identified projects deemed feasible with a demonstrable 7 year or less payback	Identify opportunities for increased reflectivity on roofs and other relevant surfaces
	Assess and verify HVAC scheduling and set-points programs	
	Explore feasibility of solar and geothermal projects	
	Begin engaging in retro-commissioning for campus buildings whose systems have not outlived their designed life	
	Begin additional research and identification of conservation opportunities	
	Develop methods of meaningful communication of building performance	
LOWER PRIORITY	Continue lighting retrofit projects (when not otherwise covered in commissioning or audit activities)	Assess opportunities to reduce energy load of audio/visual equipment
	Complete operations profile for every building	Assess desktop virtualization program



FOOD & DINING SERVICES

HIGHER PRIORITY	Require an annual sustainable food report	Consider potential for on-campus growing/processing of food items that would otherwise be purchased
	Establish part-time student or staff position to focus on issues of sustainability and nutrition	Identify opportunities to engage in community-based food projects
	Develop marketing and education/awareness plan for sustainable food programs	Identify hazardous food additives and conduct review of products that contain those additives
	Explore potential for using distributors of locally-produced foods	
	Identify opportunities to purchase locally-processed/prepared food items and businesses	
LOWER PRIORITY	Start programs for regular specialty meals and events	Assess options for third-party sustainability certifications of Dining Services as an operation
	Work with Book Store and Café to explore opportunities for more sustainable purchasing	Develop/expand UMSL Sustainable Catering program
	Create training for Dining Services staff on sustainability-related topics	Identify opportunities to purchase products with specific welfare-related standards
	Identify opportunities to purchase more fair trade products	

TIMELINE AND PRIORITIES FOR SUSTAINABILITY OBJECTIVES AT UMSL

2013-2015

2016-2025



GREEN BUILDING

Implement UM System policy related to green building standards

Explore opportunities to pursue LEED-EBOM certification for one or two existing campus facilities



PROCUREMENT

HIGHER
PRIORITY

Adopt new Environmental Purchasing Guidelines

Assess opportunities to transition UMSL logo items in Book Store to sustainable products

Assess opportunities to move printed items to electronic formats

Distribute sustainable purchasing guide to offices

Engage in print management activities to reduce printed documents

Continue exploring cooperative purchasing options and eco-friendly options to incorporate

Expand methods for tracking paper use

Declare campus "Styrofoam-free"

LOWER
PRIORITY

Remove plastic shopping bags from campus

Develop sustainable purchasing chapter in green living guide for students

Incorporate reporting into potential centralized purchasing contract

Create "paper reuse opportunities," including collection of half-used paper for use in printers

Expand office surplus reuse and donation programs

Conduct pilot test of 100% post-consumer recycled content paper purchasing for interested departments

Conduct pilot test of 100% post-consumer recycled content letterhead

Pilot use of vegetable-based inks in printers



TIMELINE AND PRIORITIES FOR SUSTAINABILITY OBJECTIVES AT UMSL

2013-2015

2016-2025



TRANSPORTATION

HIGHER PRIORITY	Require environmental standards for vehicle purchasing process	Assess opportunities for alternative fuels in existing campus vehicles
	Implement currently identified bike rack projects	Move forward with feasible opportunities for alternative fuels in existing campus vehicles
	Develop a program for tracking transportation miles	Assess opportunities to partner with travel offset organizations and develop outreach for voluntary travel offsets
LOWER PRIORITY	Produce educational information and resources for campus cyclists	Work with City and local agencies to improve awareness of local transit options
	Better publicize staff-faculty carpooling website and develop improved system for student Rideshare opportunities	Develop an annual Bike to Work Day
	Publicize available videoconferencing as a means of reducing travel needs	Assess opportunities for telecommuting or flexible schedules as means of reducing commuting miles
	Draft Campus Bike Plan to better assess needs	Develop short- and long-term plans for Green Bikes program development



WASTE

HIGHER PRIORITY	Expand composting and food recovery programs	Expand composting program to allow composting of all food scraps from all dining areas
	Assess opportunities to move printed publications and forms to electronic formats	Further develop program to collect as much reusable waste as possible
	Engage in print management activities to reduce printed documents	Discontinue use of all non-biodegradable disposable dining ware in dining hall operations and catering
	Eliminate use of non-reusable dining ware in normal dine-in dining hall operations	Conduct follow-up comprehensive campus waste audit to understand campus waste
	Develop ways to better continuously assess campus waste streams and provide data publicly	Create Zero Waste Events program, including educational guides and materials for departments
	Conduct an annual waste audit for post-consumer dining wastes	Create move-in waste awareness program for first-year students
	Create targeted education campaigns based on waste audits	
	Create "paper reuse opportunities," including collection of half-used paper for printers	
	Declare campus "Styrofoam-free"	
LOWER PRIORITY	Remove plastic shopping bags from campus	Develop new waste management techniques and programs
	Expand opportunities for specialized waste disposal	Assess opportunities for reduced chemical waste in academic programs
	Start bi-annual campus-wide count of trash and recycling bins	
	Assess opportunities to start an office surplus reuse or donation program	
	Conduct annual field trips to the landfill, recycling center, electronic waste center, and other sites	